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A

TREATISE

UPON

Huſbandry *or* Planting.

By *William Belgrove.*

A regular bred, and long experienc'd Planter,
Of the Iſland of *Barbados.*

And may be of great Uſe to the Planters
of all the *Weſt-India* Iſlands.

BOSTON: NEW-ENGLAND,

Printed by D. FOWLE in *Ann-Street*, near the
Town-Dock. 1755.

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RPJCB

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A Treatiſe

Upon Huſbandry or Planting in BARBADOS.

IT is an obvious Remark, that the Profits ariſing from Huſbandry are always proportionate to the Care and Attention we give it. And as it is acknowledged by all that a Plantation, ſeaſonably cultivated in this Iſland, will yield great Profits, *if judiciouſly managed*; which, if not ſtrictly attended to, will, on Account of the Variety of Accidents, to which it is by its Nature ſubject, ſoon become a Charge and Debtor to the Owner; it would be ſuperfluous and unneceſſary to urge the Neceſſity, or enumerate the Advantages, of a conſtant Attention to the Management of a Plantation.

What I now propoſe in this little Treatiſe is, *Firſt*, To recommend ſome Rules and Methods by which I conceive a Plantation may be managed to the greateſt Advantage. And thoſe will be calculated particularly for the Management of one of five hundred Acres of Land.

Secondly, I ſhall recommend what Buildings are proper, what Number of Negroes is ſufficient

ent, and what Stock of different Sorts is requir-ed to work up to the height an Eſtate of that Size : To which I ſhall add ſome Obſervations upon, and ſome Directions for, the making of *Rum* and the improvement of *Sugar*.

Laſtly, I ſhall fix the Value of the Eſtate after it is compleatly built and ſtocked, and cal-culate the annual Expences of it.--- And if any Thing that I ſhall offer on this Subject ſhall in the leaſt contribute to the Benefit of Maſters or the Improvement of Managers, my Deſign will be anſwered. If it ſhould be thought that I have not ſucceeded, I hope the Candour of my Readers will reſtrain their Cenſures and Con-tempt of theſe my well meant Endeavours : I further hope they will in ſuch Caſe be rather inclined to lend their Aſſiſtance to a Work which may prove ſerviceable to the Publick. A conſideration which has induced me to pub-liſh theſe plain Obſervations which were at firſt made for my own Amuſement and Improve-ment. I ſhall now begin to ſhew what I think is the beſt Method of preparing the Land for *Canes*, and of planting and reaping a *Crop* ; for which End I ſhall divide the Buſineſs of the Year, and preſcribe what is proper to be done in each Month.

Of

Of Lineing and Holeing the Land for *Canes*.

AN Acre of Land contains 43560 Feet. Now to know the Number of Holes that will be contained in an Acre at any certain Diſtance which you deſign to line at, you muſt divide the Number of Feet in an Acre by the Number of Feet that will be contained in one Hole, Bank and Diſtance; and your Quotient will give you the Number of Holes in the Acre at that lineing. *As for Example*, if you line at five Feet one way, and three and half Feet a-croſs, you'l have in one Hole, Bank and Diſtance ſeventeen Feet and half, which make your Diviſor, and the Number of Feet in the Acre, your Dividend, your Quotient will give you the Number of Holes: which you'l find it is neceſſary to know to be enabled to proportion your Dung; by this Method you will know to a Certainty the Quantity of Dung you'l require, not only for one Field, but for the whole Crop you purpoſe to plant; without

which

which Adjuſtment you cannot be regular in your Dung.

Examples of Lineing, (*viz.*)

			Holes.
At 5 & 3½	Feet you'l have	17½ ſquare	2489
5 & 3	. . . . .	15 . . .	2904
4½ & 3½	. . . . .	15¾ . . .	2765
4½ & 3	. . . . .	13½ . . .	3226
4 & 4	. . . . .	16 . . .	2722
4 & 3½	. . . . .	14 . . .	3111
4 & 3	. . . . .	12 . . .	3630

Theſe are the Diſtances at which we generally line the Land; except it be in a very poor Soil, where the *Canes* do not ſucker and bunch by an After-ſpring: In ſuch places we line cloſer; for the Quality of the Soil ſhould govern the Diſtance of Holeing.---- The Diſtance I would recommend as moſt proper to hole at in moſt Parts of the Iſland is four Feet every Way. By holeing at this Diſtance you turn up and manure more of the Soil, and alſo give the Canes the Benefit of Air, which is as neceſſary to Vegetation as Heat or Moiſture. But what I do moſt earneſtly recommend is to turn up all the Land you deſign to plant at leaſt two Months before you hole it. If it be turned up ſix or eight Inches,

and

and lie that Time before it be holed, you will never fail of a vigorous Spring---- If it be objected that this Method is attended with too great Labour, and an expence of Time, I anſwer, that he who treats his Land in this Manner, ſo effectually deſtroys all the Weeds, (except it be the invincible Nut-Graſs,) and ſo mellows the Land, that the Time afterwards ſaved in thoſe two Articles, is at leaſt equal to that ſpent in turning it up.

As to *Dung*, the Article upon which the ſucceſs of a Crop almoſt intirely depends, it is I think impoſſible to preſcribe any particular Rule for the making it: However ſo far as I am able to explain my own Method, I will.

When a ſett of Pens is fixt, I think it proper at the ſame Time, to throw up as much Mould as will be ſufficient to ſerve the whole Sett. And I adviſe every one moſt carefully to avoid the uſe of poor and hungry Mould. He who can ſupply himſelf from Gulleys or Mould-Holes, will find that the Time and Trouble it coſts him to make his Dung with Mould gathered from ſuch Places, will be very inconſiderable, with reſpect to the great Benefits he may expect to reap therefrom. It has been

a-

a Cuſtom of long ſtanding, to mould Pens once every Fortnight; the Stratum of Mould, four Inches, that of Traſh, when cloſe trodden, two Inches.

I have already given my Opinion of the Mould moſt proper to be uſed for *Dung*: to which I ſhall add, that only ſuch a Quantity ſhould be laid upon the Pens, as is juſt ſufficient to retain the Tincture, which it may be thought to receive from the Time of one Moulding to the next.

For whatever may be thought of Quantity, I am of Opinion, that he who makes the beſt, makes the moſt *Dung*.---- As to Traſh, which is uſed by many, I do intirely exclude it, raw and unprepared; except what is ſufficient to preſerve the Cattle from Mud and Mire in the wet Seaſons.--- The Litter from the Stable, if a ſufficient Number of Horſes be kept on an Eſtate, will be always enough for the Pens; provided it be properly managed.--- This is an Article, on which much might be ſaid: But as Men differ widely in their Opinions concerning the uſe of it, I ſhall not preſcribe what Time it ought to lie in the Stable before it be cleaned out, or how it ſhould be afterwards applied.

My

My own Opinion is, that the longer it lies together in the Stable, the more it contributes to the Improvement of the Dung; provided when it be taken from the Stable, it be immediately thrown upon the Pens and covered with Mould: It being then hot, and that Heat confin'd by the Mould that is thrown over it, it ferments and divides, and ſeparates the Mould; and thereby produces good Dung. While I am ſpeaking upon Dung, I muſt not neglect ſtrenuouſly to recommend the turning of it as often as it is convenient and conſiſtent with other Buſineſs.

In order to know how many Head of Cattle a Pen of any Size requires, allowing ten ſquare Feet to every Beaſt, you muſt multiply one Square by the other. *As for Example.*

A Pen	of	30 Feet ſquare,	9 Head of Cattle.
		40	16
		50	25
		60	36

And ſo continue the Proportion for a Pen of any Size: And to know the Number of ſquare Feet of Dung any Heap contains, you muſt multiply the Squares together, which Product

multiply by the Thickneſs, and that gives you the Number of ſolid Feet of Dung: *As for Example.*

A Pen of 20 Feet ſquare and 2 Feet thick, is 800 ſolid Feet,---which when well cured and digeſted will weigh about 80 Pounds. But 50 or 60 Pounds of good Dung may be ſufficient for each Hole.

The general Allowance at preſent, is a ſquare or ſolid Foot of Dung to each Hole, which ought to be well cured and digeſted, and laid one half in the bottom of the Holes, and the other on the Plants. If the Land is moiſt, and the Canes generally bunch well, two or three good Plants will be ſufficient; for it often happens, by putting in too many Plants, the Canes are withy and yield little: but in late or unſeaſonable Planting, many Plants ſhould be uſed. By knowing the Number of Feet in a heap of Dung, and the Number of Holes in an Acre of Land, we become enabled to calculate our Dung for that Number of Acres we deſign to make our Crop conſiſt of.

Not more than one fourth of the Cane Land ſhould be annually planted in Canes. Now in order to calculate your Dung for the Crop, you

you are firſt to find out the Number of Holes that each Piece of Land will contain, according to the Diſtance you line at ; This will inform you what Number of Pens, and of what Dimenſions, the Piece will require ; allowing a Foot of Dung to each Hole.

Obſerve, to ſituate your Dung-Heaps moſt convenient for the Carriage, as that is a great Article of the Labour, both in making the Dung, and throwing it to the Holes, for you are to avoid making more Dung in one Heap, than will ſerve two Acres, leaſt you increaſe the Labour on your Slaves, who ought to be eaſed and encouraged as much as poſſible. Another Thing by which they are greatly oppreſſed is, the planting a greater Number of Acres than the Plantation can well afford ; by which the Cattle are deprived of the grazing they require, and bad Shifts uſed every Year to keep up an equal Quantity ; which is a vaſt Prejudice. A proper Number and Strength of Slaves ſhould always be kept on a Plantation, and no Dependance had upon hired Labour ; which will occaſion many Diſappointments, and forces the Huſbandman to do many Things out of Seaſon, by which he muſt fail of Succeſs.

As

As theſe Particulars are very hurtful to the Owners of Plantations as well as to the Reputation of the Huſbandman, whoſe Care they are under, thoſe who have Eſtates under their Direction ſhould ſupply them with all neceſſaries for their better Improvement.

The want of a ſufficient Stock of Cattle and Horſes, to make the Dung within due Time, is attended with many Inconveniences, and a manifeſt Loſs. And I not only recommend a proper Quantity of thoſe, but a ſufficient Strength of Negroes; whom I would employ on a Work, which though of much Conſequence, has been very little thought of. I mean to provide a Plenty of Meat to feed the Cattle on the Pens, and to gather as many green Buſhes, Vines, &c. as poſſible, which with every Thing of the vegetable Kind, will greatly improve the Dung.

Of dividing the twelve Months of the Year; and appointing the reſpective Buſineſs for each Month.

January. This Month your Proviſions of all ſorts being Ripe, break in your Corn, dig in your Yams, and Eddoes, gather your

your dry Grain of all Sorts ; though you will have ſeveral Gathers of the Pigeon-Peaſe, &c. after you have reaped the Corn ; If you can avoid it, do not plant the Pigeon-Peaſe in the Guinea Corn-Fields, as that will prevent your grazing your Cattle after you have gather'd your Corn, and which ſhould be done to enable your Cattle to perform the Labour of your Crop ; and beſides that Diſadvantage, when your Peaſe Trees are full of Bloſſoms in the Month of *November*, the high Winds then will ſtrike the Stalks of the Corn againſt the Boughs of the Peaſe, and bruſh off the Bloſſoms and young Peaſe, and in the beginning of *January* before the Corn is ripe enough to reap, the ſame Stalks will ſtrike thoſe Boughs of Peaſe which then will be full of dry Grain, and huſk them out, thefore they ought if poſſible to be ſeparate.

Cut down your Corn Stalks for Fewel, and provide as much as you poſſibly can of Bruſh, &c. for your Stoke-Holes. As your Watchmen are now called in, get immediately to making Sugar. It is beſt to avoid grinding Canes on a Saturday : If many Canes are cut down, and left all Night in the Field, or at the Mill, they muſt be carefully watched or well ſecured, otherwiſe they will be greatly ſtolen. The Fewel

ſhould

ſhould be dry to make the Coppers boil well ; and the Stokers ſhould be engaged to keep regular conſtant good Fires. The Boilers ſhould be very diligent in well attending the Coppers, and very well cleaning the Liquor only of the Filth ; and not throw down to the Still-Houſe any Liquor that may be made into Sugar : And you ſhould never boil after 11 o'Clock at Night at the lateſt.--- Skip your Sugar at an equal moderate due Height ; and neither Pot it too hot, or too cold.--- Although your Canes will yield but indifferently in this Month, you'l find it more to your Advantage to meet your Loſs at the beginning of the Crop than at the cloſe of it. Don't let your Cattle run too long over your Guinea Corn Stumps, becauſe you'l want that Supply of Meat for your Stock which you'l require upon finiſhing the Crop, and thereby be reduced to aſſign the too common, which indeed is an idle Reaſon, for not cloſing the Crop : i. e. " If I ſhould finiſh my Crop, " the Stock muſt ſtarve."

February. Keep cloſe to making Sugar, notwithſtanding the great Variety you'l meet with ; which you muſt expect according to the Age of the Canes, and the Soil they grow upon.

upon. If you have Showers, be ſure to ſupply your young Canes with Tops, and fill up your Still Pond with all you deſign to put in it: And prepare as much Fewel as you can poſſibly; and charge round all your Dung Pits, that you may have nothing to interfere with making of Sugar the whole enſuing Month. By no Means neglect to weed the young Canes.---

March. This is a good Month for making of Sugar, therefore do nothing elſe whilſt you can keep at work. You'l diſcover very little Variation in the yielding, for the Canes are now in Perfection. If you ſhould have Rain, open all the Land you deſign for Indian Corn, Guinnea Corn, Yams, and every other ſort of Proviſions, as, not the leaſt Opportunity ought to be loſt, conſidering the great Advantage of moulder'd Land, for all Things; and eſpecially Grain, as the Vermine will deſtroy it, if the Land is not moulder'd to give it an immediate Spring.

April. This Month is equal with the former, for making of Sugar, except that we expect, and have generally more Showers; therefore

therefore go on as is preſcribed above; plant and ſupply your Plantain Walk. Twenty Acres of Land well kept in a Plantain Walk, will afford a very conſiderable Support, as Plantains are as hearty a Food as Eddoes, and the Plantain Walk may be a Nurſery for declining Slaves, as well as to fatten old Cattle when they are paſt Labour.

May. This Month the Canes will make good Sugar, except a little dark, as they will begin to feel the Spring; and will yield pretty well 'till towards the latter end of it, when you muſt expect great loſs in the yielding, and a weak dark Sugar, except in ſome particular Parts of this Iſland. If you are prevented by Showers from finiſhing your Crop, ſpend that Time in Planting all your Land that has the Dung made in it, and be careful to plant a large Crop of Indian Corn, from which you'l find great Advantage.

June. If you have been prevented from finiſhing your Crop the preceeding Month, beſure to do it with all convenient Expedition in this, and dig up the Banks of the Cane Holes, and mould the Indian Corn 'till it is able to bear

bear holeing through for Canes, and plant and ſupply every ſort of Proviſions. Weed clean all that is planted and growing, and proceed to holeing with your able Slaves, whilſt your others are Weeding and Nurſing all the Proviſions and keeping clean all the Guinea Corn that is in open Land, that it may be able to bear a general Cutting to feed your Cattle upon the Pens the greateſt Part of the following Month, which you'l be very well able to do, with the Aſſiſtance of the Meat from the Corn Stumps cut down in *January*, if preſerved from Abuſe. Take down your Mill Points, if you have not finiſhed your Crop, and done ſo before this Month ; for this is a Work that ought not to be deferred.

July. Move your Still-pond Dung where you intend to uſe it, and you may at your Leiſure carry the remaining Offals of the Still-Houſe, and lay over it, and turn all the Dung that is made, that it may be well mouldered and digeſted ; for no Dung ought to be uſed before it is thus prepared, if we would guard againſt the Blaſt and the Grub : beſides, by ſuch Dung you'l ſecure a regular Spring ; whereas the indifferent Spring which is commonly raiſed, will be liable to be prejudiced by the Fermentation of

undigeſted Dung. If you have any Buildings to repair or erect, or Coppers, &c. to hang, it is beſt to do it this Month, or before the wet Seaſon of the Year comes in, for at that Time all Workmen are very troubleſome, eſpecially Maſons who take off the Labourers to attend them, which will interfere with your other Buſineſs.---Beſure to keep cloſe to your Holeing with your able People, as the other Gang may be ſufficient to mould your Pens every Fortnight and carry on your light Labour: by the cloſe of this Month you ought to have half your Crop holed, and three Fourths of your Dung made, as you are never to neglect moulding your Dung-Pits of all Sorts that it may come on in it's Proportion and proper Time, therefore remove now all your home Dung-Pits of their firſt Round and repeat in the ſame Pits, as they ſhould be made full Twice in a Year, except the Still-pond. This Month you having fed your Cattle intirely upon the Pens, that Round of Dung muſt be extreamly well tinctured, therefore out of that round ſave your Stable Litter for your nextRound of Pens as you muſt always lay ſome Stable Litter over each Pen when you mould them, for your Horſe Stable may be enabled to afford it by being well ſupplied with dry Traſh, and the Horſes well fed. A Pit of Stable Dung properly

ly Moulded may be near the Stable, or the Stable Dung thrown on the other Dung every other Day to raiſe a Fermentation.

Auguſt. Having cleaned all your Proviſions and ſupplied and cut the laſt Piece of Guinea-Corn you intend for Seed, and moulded up the Stumps, as none are to be cut after *July*, leſt the Worm take it, your chief Employ is to keep to your Holeing; ſome Planters do begin to plant Canes in this Month, but thoſe early planted Canes ſeldom make a good white Sugar, nor is it common to have a kind Spring from their Stumps when cut to ſupply you with Plants, if you reſerve them for that Purpoſe. You may have 30 Acres of Land in Pigeon Peaſe and Bonavis, as they agree well together in the ſame Piece. 100 Acres in Guinea Corn, 50 Acres in Potatoes, planted at different Times to be dug regular before they ſpoil, 10 Acres in Yams, 15 Acres in Eddoes, 5 Acres of Caſavy, and the 20 Acres of Plantain Walk to maintain the White and Black Families of this Plantation, which it will do with very little or no Expence from another Market.

September.

September. This Month moſt People plant Canes in, but I would chuſe to lay all the Dung that is properly prepared, into the Cane Holes, and the Land wed very clean, and to have at leaſt four fifths of the Land for the Crop holed, and nine tenths of the Dung made, that both may be well mouldered, which will give and well ſecure a good ſtrong Spring to be well preſerved, which if was as ſtrictly obſerved as it neceſſarily ought, it would avoid that moſt troubleſome and repeated Labour of ſupplying, which is too often neglected and unſeaſonably done.

October. This Month finiſh your Holeing, and entirely employ your Time in planting Canes, and get in at leaſt three fifths of the 100 Acres planted. People were formerly fond of planting Corn in their young Canes, which if poſſible ought to be omitted, as that Corn is certainly of Prejudice to the Canes, and may be better provided for in the Manner I ſhall hereafter adviſe.

November. This is alſo a fine Month for planting Canes, therefore plant all you

you poſſibly can. Plant Potatoes and all ſorts of Peaſe; move your Pens for the enſuing Year, and with all Diligence prepare this laſt Dung which will require but little Time to lie before it is uſed; this Dung ſhould be made of rotten Traſh, Stable Litter and the fineſt Mould, as that Dung cannot have an equal Time to remain as the former Dung had, which was made in the dry Seaſon.

December. By the middle of this Month the planting of Canes ought to be entirely finiſhed--- Some Parts of the Iſland will make more and better Sugar in ſeaſonable Years from Canes planted in the Months of *January*, *February*, and *March*, but the moſt neceſſary and proper Work to be done in theſe Months is certainly the reaping the ripe Crop. Raiſe your Mill Points, and put all your Affairs in Order, for you have little to do but to reap your Proviſions, as they are all near ripe at this Time, and is the moſt proper Employ for the Slaves, as their Spirits and Fleſh muſt be reduced after the Year's Fatigue of hard Labour: Weed over all your young Canes, and when I ſay, mould your Canes, I would not be underſtood to draw down the Banks as was the former Practice, for by that Method, without the greateſt Care, the

Slaves

Slaves will draw down ſo much Earth as deſtroys the Succours, therefore dig up the Banks and Diſtances, but beſure to do it when the Land is very dry, by which Practice you'l the more effectually deſtroy the Weeds or Graſs, and give them the greater Nouriſhment, from every ſmall Shower, even the Dews in the Night, will penetrate to their Advantage. Now you have 100 Acres of Canes well and ſeaſonably planted, and your Pens in ſome part of the 50 Acres of Potatoe Pieces which were lately dug out, as the whole 50 Acres will come into the next Year's 100 Acres (the 10 Acres you dug the Yams out of, and the 15 that the Eddoes were in, put into Potatoes) and of the 60 Acres that were drawn for Plants, 50 Acres of them will make up the next Year's enſuing 100. And that other 10 of the 60 may be planted with Yams: Now this 100 Acres of firſt Crop Canes is in good Order: And I will ſuppoſe I had 40 Acres of ſecond Crop kept out of the laſt Year's 100 Acres, which are now to be broken with the 100 Acres of firſt Crop, which is to be reaped in the Manner I ſhall recommend by the Plantation I ſhall deſcribe.

A Plantation of five hundred Acres of Land requires,--- A Dwelling-Houſe,--- Two Wind-Mills,

Mills,---- A Boiling-Houſe,---- A Diſtilling-Houſe,--- A Curing-Houſe large enough to contain at leaſt 2500 Pots,--- A Stable to hold thirty Horſes, with a Loft over it for dry Grain,---- A Rum-Houſe,--- An Houſe for Servants,--- A Sick-Houſe,--- A proper Room to confine diſorderly Negroes,--- A Store-Houſe for Salt Proviſions,--- A Smith-Shop,--- A Cooper's-Shop,---A Traſh-Houſe,--- And a Store for Engliſh Goods. It requires three hundred Slaves,---An hundred and fifty head of Cattle,--- Twenty five Horſes,--- Fifty head of Sheep.

I would chuſe the Boiling-Houſe to contain eighteen Coppers of three different Sizes, viz. Three Tatches at each End ; two Cleanſers to each Side, each to contain two hundred and twenty five Gallons ; and four Clarifiers to each End, each to contain three hundred Gallons. I proportion them in this Manner, becauſe if the Perſon, who ſtands at the Clarifier does his Duty, there will not be more than twenty five per Ct. of Filth and aqueous Matter exhauſted when the Liquor is fit to be ſent forward to be Strained.--

The Diſtilling Houſe ſhould have three Stills to contain 900 Gallons of Liquor, and a Fourth big enough to contain the low Wines produced from

from the other three. It will require 48 Vats of three hundred Gallons each, although 36 Vats will employ thoſe Stills twice a Day thro'-out the Week, as 12 times the Stills is the content of 36 Vats at 300 Gallons each: But as Liquor requires to be fallen ſome ſhort Time before you diſtill it, and as there are frequent Variations in the falling, as well as in the yielding of Liquor, though ſeveral Veſſels may be ſet at the ſame Time, and every Proportion alike: You will not be able to Diſtill above 36 Vats per Week; However there is a Neceſſity to keep the 48 employed, that you may always be provided with a ſufficiency of Liquor fallen. It will require the Boiling-Houſe to make 300 Pots of Sugar per Week to employ thoſe Veſſels and Stills, for each Pot of Sugar will afford 12 or 13 Gallons of Skimings; but ſuppoſe only 12 Gallons per Pot, 12 times 300 is 3600 Gallons of Skimings, which being mixed at a Proportion of 25 per Cent Skimings, will ſet the 48 Vats of 300 Gallons each, or the 14400 Gallons of Liquor, or being mixed at a Proportion of ſome of the following Receipts will produce a Gallon of proof Rum to every ſix Gallons of fermented Liquor, as 2400 Gallons of Rum is the one ſixth Part of 14400 Gallons of that Liquor. I would not be underſtood by this Calculation that it is infallible;

infallible ; nor that you are to expect this Succeſs by being confined to any particular Receipt ; for I have already hinted, that you will meet ſundry Variations which will require the Diſtillers Attention to watch every Circumſtance ; for although it has been calculated that five Gallons of Skimings is equal to one Gallon of Molaſſes, yet it is not ſo throughout every Month, ſometimes four, ſometimes ſix, and I have known eight : which Diſcovery is to be made from the Quantity of Spirit extracted : here let me obſerve, that there is a great Difference between a weak and a firm bodied Sugar, or Sugar boiled very high, and that which is boiled very low. I would be underſtood herein, that when the Crop is finiſhed, and the Boiling-Houſe and Still-Houſe Journals are fairly adjuſted, that then you'l find upon an Average, you'l not be ſhort of eight Gallons to a Pot of Double-clayed Sugar, which yields in the Total $5\frac{1}{2}$ Gallons of Molaſſes, and if the Skimings from it yields equal to $2\frac{1}{2}$ Gallons of Molaſſes, thoſe Materials muſt be ſufficient for eight Gallons of Rum, as 8 times 300 is 2400, which Quantity of Rum may be produced from 14400 Gallons of Liquor ſet from the Offals of the 300 Pots of Double-clayed Sugar. It was formerly generally imagined that there could not be more Rum made from

a Pot of Double-clayed Sugar than five Gallons without Prejudice to the Boiling-Houſe, but this Miſtake is now rectified, and it is allowed that eight Gallons of Rum may with Care be made from a ten Gallon Pot of Double-clayed Sugar. But you muſt ſtrictly attend to the following Regulations (the Liquor that will make a ten Gallon Pot of Sugar, will afford 12 or 13 Gallons of Skimings, and that Pot double-clayed will yield $5\frac{1}{2}$ Gallons of Molaſſes, and the Skimings being equal to $2\frac{1}{2}$, makes it eight Gallons per Pot.)

Regulations to be obſerved in the Still-Houſe.

Be careful to cool your Coppers in the Boiling-Houſe with no more Water than will be ſufficient for that Day's Offals of the Number of Pots of Sugar made; which turn down to your Receiving-Ciſtern in the Still-Houſe, each ſeparate, that you may be the better able to adjuſt the Proportions in your Mixing-Ciſterns; and from thence fill up your fermenting Vats, by which Practice you'l be ſure that the Proportions of each Vat are alike, and which you may ſet the following Day.

Never

Never throw in your Molaſſes before you diſcover the Liquor to ferment, which it will, within twenty-four Hours, unleſs your Returns with which it was ſet, was too hot; be careful to ſkim the Liquor conſtantly, and to let it lay cloſe covered, at leaſt twenty-four Hours, after it has fallen, before you diſtill it; for there is a Fermentation beneath, after it diſappears upon the Surface. Never let a Veſſel remain empty while you have Molaſſes, though you may be without Skimings, and be ſure every Time you empty a Veſſel to waſh out that thick Sediment with thin Return-Liquor before you fill it again. It will require you to have three Return-Ciſterns, by which you'l always be furniſhed with thin cool Returns, and by keeping them as clean, as I have recommended the Vats to be kept, you'l eſcape that Miſcarriage which often happens by thick Returns.

It is alſo neceſſary to have three Receiving Ciſterns, one for Water, and the other two for Skimings, for all thick Matter is a great Obſtruction to Fermentation or Circulation. Therefore if the Liquor (after being proportion'd in the Mixing Veſſel) was ſtrained through a courſe Searge into each fermenting Vat by laying

ing it over the Vat; it may be done without the leaſt Trouble, and will totally avoid that evil.

At the beginning of a Crop before you have proper Returns.

Water 40) *Equal to* 12 per Cent, *in order*
Skimings 60) *to raiſe proper Returns* ;

(Then)

Water	20	*Water*	15	*Water*	13	*Water*	25
Returns	40	*Skimings*	30	*Skimings*	40	*Skimings*	25
Skimings	32	*Returns*	50	*Returns*	40	*Returns*	40
Molaſſes	8	*Molaſſes*	5	*Molaſſes*	7	*Molaſſes*	10
	14 *per Cent.*		11 *per Cent.*		15 *per Cent.*		15 *per Cent.*

An ancient Practice was one third of each with 10 *per Cent* Molaſſes, and I have known it ſucceed very well. You are always to have Regard to the Difference between Muſcovado-Sugar Molaſſes, and Clay'd-Sugar Molaſſes, as alſo between the firm and the weak Sugar, as well as the high boiled and the low boiled Sugar. You'l find it neceſſary to make Tryal of all thoſe different Receipts 'till you diſcover that which anſwers beſt, and which Prudence will direct your Continuance of. To ſay any Thing of Mixing without the Skimings will be quite immaterial, becauſe

becauſe the Quantity and Quality of Sweets is to be your Guide, and therefore I ſhall conclude here. Thoſe various Proportions of mixing the Liquor have been known to anſwer at different Times and in different Veſſels, which cannot be wonder'd at, when we conſider what Variety Diſtillation affords.

I ſhall now proceed to make ſome Remarks upon claying Sugar. A free Sugar fairly Cleanſed, Boiled and Tempered, will be fit to Clay in 12 or 15 Days; but to judge the better of it, ſtart it out of the Pot, and if the Molaſſes has paſt through $\frac{2}{3}$ of the Pot, return it in the ſame Poſition and clay it thus; dig up the Sugar ſo deep as to be ſure to take out all that Part that is called the Fountain, which will appear like a Plate of Glue and lies a little below the Surface of the Sugar, and which if not carefully taken out will obſtruct the Office or Purpoſe of the Clay; then pound or break your Sugar very fine and level it very firm, leaving a little Hollow in the Middle or Center of the Pot, then examine your Clay that it be ſtiff or Wax like, which you will be able to diſcover by the quantity of Water it will require to reduce it to a proper Pulp, for the more Water your Clay will bear the better, as the Clay is no

other

other than the Vehicle to retain the Water and to deliver the ſame gradually for the Uſe that the Sugar requires to alter it's Colour. Clay that will bear 25 Gallons of Water to 100 Wt. will always beſt anſwer the Purpoſe, and when it requires more, then the Uſe of Bay-Sand is neceſſary to open the Body of ſuch Clay, for the Eye alone will never be able to make a ſufficient Diſcovery, though ſuch Clay is rare to be met with : and the want of true Judgment in the ſort of Clay, and the proper Management of it, overſets in the Curing-Houſe all the Care, Pains and Judgment that has been uſed in the Boiling-Houſe, then the common and idle Excuſe is aſſigned, (i. e.) " the Soil will not make white " Sugar."

If your Sugar be a very firm Body, put one Gallon of this Batter to each ten Gallon Pot the firſt Claying, which may lie on ten Days, and ten Days after that, ſecond Clay it with ſix Pints of the like Batter, but if your Sugar be weak or low Boiled, put leſs in Quantity, and make the Batter thicker and ſo in Proportion to a Pot of any Size. You muſt always obſerve to dry your Clay extreamly well in the Sun before you weigh and mix it.---

I ſhall proceed to ſay ſomething in Relation to melting down or improving Sugar from a coarſe Stock.

Take 1000 Weight of the Bottoms of Clayed Sugar well dryed in the Sun, to which add one third of that Weight of white Lime-Water, all which mix in the Copper 'till it is well incorporated, then take one Gallon and a half of Blood (of your Cattle) and divide it into three equal Parts, and to each Part add half a Gallon of white Lime-Water, with each of which raiſe a Scum, by a very gentle Fire, which as ſoon as you obſerve to begin to break, draw back your Fire, and let it remain half an Hour to gather up the Scum which the Uſe of the Fire will raiſe, and the quality of the Blood will cloſe, which Scum take off with a ſteady Hand, leſt you ſink that Filth to the Bottom, from whence it will not aſcend ; and ſo continue to repeat the Uſe of the Blood with which you'l raiſe many Scums : in like Manner act with 100 Eggs, only the Whites, ten each Time, with ſome Lime-Water, which will raiſe many Scums and clear the Syrrup off that reddiſh Colour the Blood may have given it ; then keep up a ſtrong Fire, and well work your Liquor by brewing and beating it with the Skimmer, to raiſe the

Scum,

Scum, which, with a nimble light Hand will ſoon procure a fine Tranſparent Syrrup, then ſtrain it into your Tatch and Boil it off with the quickeſt Fire, obſerving to make three Skips of it, the firſt of a very low Muſcovado Height, the ſecond a little higher, and the third a full Height, all which mix well in your Cooler by ſtirring and brewing, and Pot it hot enough to admit of a third Stirring in the Pots ; your Pots muſt be very clean as well as dry.--- In three or four Days you may clay it according to the Directions given in the foregoing to clay Sugar, and in eight Days you may ſecond Clay it according to the former Preſcriptions.

To Refine the foregoing Stock you may do it thus :

Take any Quantity of it, to which add $\frac{3}{4}$ of the $\frac{1}{3}$ of its Weight in fair Water, and well mix and incorporate it, then make Uſe of 100 or more Eggs in raiſing many Scums as before preſcribed, and with all Diligence and Caution attend to your Fire, that it may be timely drawn back, and a proper Time given to gather up the Scum and Filth, and ſo continue to repeat until you have uſed all the Eggs, then well cleanſe your Syrrup and ſtrain it into the Tatches

and

and then boil it to a low Muſcovado Height, it will require great exactneſs, leſt it run too high, for that Error is without Remedy, Pot it, Stir and Clay it as before adviſed.

I would adviſe this Plantation of 500 Acres to be laid off by Survey in ten Acre-Fields, and that the Cane-Fields, &c. may be formed in Chequer Order, that it may be convenient to carry the Traſh to the Neighbouring Pieces to make Dung, and the Plants to plant it; and of the 500 Acres you'l have 100 Acres every Year in firſt Crop, and as you'l have 150 head of Cattle, 25 Horſes and 50 head of Sheep: this Stock with the Still-Pond will be ſufficient Dung for the 100 Acres, which being ſo ſeaſonably Planted, and with ſuch a Proportion of Tincture, you may reaſonably expect a very good Produce from the ſecond Crop, 40 Acres of which you are to reſerve for Sugar Annually: All the reſt of the Plantation muſt be in Proviſions, Paſtures, Wood for Negro Houſes (which ought to be kept in good Order, as more Negroes dye for want of proper Houſes than by other Means) Cattle Pens, Yards, and Commons. I would always have 50 Acres of Potatoes planted at different Times, as they are a ready Food for Human and animal Creatures, and greatly

improve the Land, and excluſive of thoſe Conſiderations they will ſave you that great Expence of planting Indian Corn in the young Canes called the *November* Crop, which is extreamly injurious to thoſe Canes as Experience has proved ; for ſuch a Field of Canes wherein a fine *November* Crop of Corn has been reaped, have continued to ſhew a regular Diſtinction in each Row until thoſe Canes have been cut to make Sugar, and that Diſcovery could be made at a very diſtant Proſpect from the Field.

I would recommend inſtead of moulding your young Canes according to the former Cuſtom, to dig up the intermediate Spaces, ſuch as the Banks and Diſtances, and to perform it always when the Earth is very dry, and repeat this frequently at the Diſtance of ten or fifteen Days until you have brought all the hard Lumps of Earth into a fine Mould, through which all Moiſture will conſtantly penetrate to the Roots of the Canes ; by this Huſbandry it may be reaſonable to expect near fifty Pots per Acre, which with 40 Acres of ſecond Crop Canes we may reaſonably hope, will yield five Thouſand Pots per Annum ; the remaining ſixty Acres of ſecond Crop Canes you muſt keep very clean to raiſe you a Sufficiency of Plants to plant the enſuing

ſuing 100 Acres. Prudence will direct you Yearly to exchange your Cane Pieces, whereby the whole 100 Acres will become changed every fourth Year; but be ſure to obſerve and keep up the Figure of your Huſbandry in a regular Chequer Order to manifeſt your Abilities in that Office as well as your Diſcretion, by contracting the Labour of the Huſbandry, and by this continual Exchange of your Cane-Fields, you'l very much enrich your Paſtures, to the vaſt Advantage of your Cattle: In all your Land, wherein your Dung is made by the firſt Day of *May* (which ought to be at leaſt ſixty Acres as you removed in *November*,) be ſure to plant a large Crop of Indian Corn in every Row, and to hole through it as early as the Corn can bear the Cane Bank, from which you may reap eight Hundred or a Thouſand Buſhels of that ſort of Corn; and from 100 Acres of Guinea-Corn well taken Care of, may be reaped from fifteen Hundred to two Thouſand Buſhels of Corn, which with the conſtant ſupply of the Potatoes out of the fifty Acres within the Year, and the Aſſiſtance of the twenty Acres of Plantain-walk together with the green and dry Grain, and the 10 Acres of Yams, and the 15 Acres of Eddoes, and 5 Acres of Caſavy, will certainly be ſufficient Food for 300 Slaves, provided theſe Proviſions

are

are as ſeaſonably Planted and as well taken care of as before recommended ; and provided alſo no Accident happens to any of thoſe ſeveral Sorts of Proviſions. With the Conveniences, Strength, &c. before-mention'd, it will be in the Power of the Huſband-man to do every Thing in its moſt proper Seaſon, I mean not to be a Planting when he ought to be Reaping, or a Reaping when he ought to be Planting : Therefore he may reap this Crop of Sugar in about twenty Weeks by making about three Hundred Pots per Week, and as his Still-Houſe will contain 14400 Gallons of Liquor, and diſpatch 10800 Gallons of it into a Diſcharge of 1800 Gallons of Rum per Week ; therefore within 26 or 27 Weeks, the Still-Houſe may diſpence with the Offals of the five Thouſand Pots of Double-clayed Sugar, and according to that Calculation of Time the Sugar may be all made by the cloſe of *May*, or very early in *June* ; and the Rum by the cloſe of *Auguſt*, or early in *September* : for as there is ſufficient Room reſerved for more Sugar and Rum to be made, if Accidents ſhould happen to prevent the Regularity before-mentioned, you'l not be confin'd in any caſe ; therefore it is neceſſary that the Curing-Houſe ſhould have Room to contain two Thouſand five Hundred Pots of Clayed-Sugar as is before expreſſed

expreſſed ; and as this Sugar when Double-clayed may be ſent to Market in ten Weeks after it is made, and there is a ſufficient Still-Houſe to diſpenſe with the Offals, I ſee no juſt Reaſon why this Still-Houſe ſhould be making Rum in the wet Seaſon of the Year, when no good Fermentation can be expected or made equal to the Months between *January* and *Auguſt* ; ſo that the Excuſe muſt be Idle, that may be alledged for making Rum late.

I think I have given the Huſbandman ſufficient Time from the middle of *June* to the firſt of *October*, to nurſe his young Crop ; plant all his Proviſions or rather nurſe them, and prepare his Dung with holeing the 100 Acres of Land for the Crop of Canes, as he may receive great Aſſiſtance in ſome ſorts of thoſe Works from three Cattle-Carts, and two Horſe-Carts which I recommend to be kept upon this Eſtate.

It is neceſſary to reſerve great Quantity of dry Traſh to Litter the Pens and Stable and to make proper Shelters for the poorer Cattle in the wet Seaſon, as they are ſubject to many Diſorders, beſides their Hoofs becoming ſoft, which alone will occaſion a Beaſt to look thin as he will refuſe the Paſture for want of Feet : And this work of raiſing thoſe heaps of Traſh may be done

done immediately after finiſhing the Crop, by taking it off from thoſe 40 Acres of the ſecond Crop you reſerve for Sugar, by doing which you'l give yourſelf Room to dig up the intermediate Spaces in that Land which muſt be performed in the ſame Manner as directed, at about ten or fifteen Days diſtance of Time, and continued until the large Lumps of Earth becomes pulverized, which the Sun will very much aſſiſt to do, and until thoſe Canes become too forward to admit Repetition: ſhallow Land will not ſo well bear this as deep Land.

It has frequently happen'd that in the Months of *March* and *April* in many Parts of this Iſland, fifty Gallons of Cane-Juice have made a ten Gallon Pot of Sugar, and at ſome particular Places, 45 Gallons have been known to make it; which Sugar will weigh Green, 120 lb. the ſame after it is regularly clay'd a ſecond Time, and perfectly Cured will weigh from 48 to 60 lb. the difference of Weight the Still-Houſe is chargeable with to the Curing-Houſe in the ſeveral ſorts of Molaſſes, viz. the Muſcovado, the firſt and ſecond clayed Molaſſes, as well as the Still-Houſe is chargeable to the Boiling-Houſe for the Quantity of Skimmings it receives from thence, all which Materials, as has been already

ſhewn,

ſhewn, may make eight Gallons of Rum to that Pot of Sugar.

I ſhall proceed to fix a reaſonable Valuation upon the foregoing Plantation, and the Groſs Produce ; and examine what Expences it will require to ſupport it Annually. In doing which, I ſhall endeavour to be as regular as poſſible.

An exact Eſtimate of the Mettals and Utenſils, required to furniſh the foregoing Plantation of 500 Acres of Land, *viz.*

8 *Clarifiers to contain* 300 *Gallons each, to weigh* 2 lb. *to a Gallon, and at* 2*ſ. per* lb.	480
4 *Cleanſers to contain* 225 *Gallons each at ditto.*	180
6 *Tatches to contain and weigh,* viz. 2 *ditto at* 50 *Gallons, each at* 6 lb. *to a Gallon,* 2 *ditto at* 60 *Gallons, each at* 5 lb. *to a Gallon, and* 2 *ditto at* 80 *Gallons, each at* 4 lb. *to a Gallon, and* 2*ſ. per* lb.	184
	£. 844

3 *Stills*

Brought over £.			844
3 *Stills to contain* 300 *Gallons, each at* 2 lb. *to a Gallon, and at* 2*s. per* lb. *with Heads of* 150 lb. *each at* 20*d. per* lb. *and to each a Worm of* 400 Weight *at* 20*d. per* lb.			317 10
1 *small Still for low Wines of* 200 *Gallons at* 2 lb. *to a Gallon, and at* 2*s. per* lb. *and a Head of* 100 *Weight at* 20*d. per* lb. *and a Worm of* 300 Weight *at* 20*d. per* lb.			73 6 8
10,000 lb. *of Lead at* £ 18 4*s. per Foder.*			91
4 *Coolers to hold* 100 *Gallons each, and to weigh* 3 lb. to *a Gallon, and at* 2*s. per* lb.			120
2 *Sugar Basons to Pot Sugar, at* 50*s. each.*			5
12 *Copper Lamps at* 15*s. each.*			9
18 *Skimers and* 12 *Ladles at* 10*s. each.*			15
4 *Worm Tubs at* £. 10 *each.*			40
48 *Fermenting Vats, each* £. 5			240
Carried over £.			1754 16 8

For

	£.	s.	d.
Brought over	1754	16	8
For Waſhers for the Vats, and Braſs Stop-Cocks for Pumps.	105	3	4
140 *Gratings* 1400 lb. *at* 10*ſ. per Cent.*	70		
3 *Cattle-Carts and* 2 *Horſe-Carts with their Furniture at* £. 24 *each.*	120		
3000 *Pair of Pots and Jars at* 3*ſ. per Pair.*	450		
The Amount of the Mettles and Utenſils.	2500		
An exact Valuation of the Buildings.			
A Dwelling-Houſe.	500		
2 *Wind-Mills at* £. 500 *each.*	1000		
A Boiling-Houſe.	600		
A Diſtill-Houſe with three Receiving-Ciſterns, one Mixing ditto, and four Return-Ciſterns.	800		
A Curing-Houſe with a Shed the length of it, with a Loft over the Shed, in which the Plantation Stores may be kept.	1100		
Carried over £.	6500		

	£.	s.	d.
Brought over	6500		
A Barbecue-Houſe.	100		
A Horſe-Stable.	350		
A Houſe for Servants.	100		
A Sick-Houſe, and a proper Room to confine Negroes.	100		
A Cooper's-Shop, a Smith-Shop, and a Room for Salt Proviſions.	150		
A Traſh-Houſe.	50		
A Water-Ciſtern.	150		
	7500		
500 *Acres of bare Land at £.* 20 *per Acre.*	10000		
	£. 17500		

The Furniture of the Boiling-Houſe, viz. *Coppers, Coolers, Baſons, Skimers, Ladles, Lamps, and Lead,* &c. *Amounts to*	1154		
The Furniture of the Still-Houſe, viz. *Stills, Heads, Worms, Tubs, Vats, Waſhers, Cooks and Pumps, Amount to*	776		
The Furniture of the Curing-Houſe, of Pots and Drips, Amount to	450		

The

The Value of the Slaves.

		£.
10 *Men*, viz. *a Mill-Man, a Boiler, a Clayer, a Diſtiller, a Groom, two Carters, two Drivers, one General Watch-man to overlook the others, at* 80 £. *per Head.*		800
20 *Men at*	£. 60 *per ditto.*	1200
20 *ditto at*	50 *per ditto.*	1000
100 *Men & Women at*	40 *per ditto.*	4000
100 *ditto at*	35 *per ditto.*	3500
50 *Improving Boys and Girls at* 30 £. *per ditto.*		1500
300 *Slaves upon an Average of* 40 *l. per Head.*		12000

Ditto of the Cattle.

40 *Oxen at*	15 *l. per Head.*	600
60 *ditto at*	10 *per ditto.*	600
50 *Improving Heifers, Steers and Bulls at* 6 *l. per ditto.*		300
150 *Head of Cattle upon an Average of* 10 *l. per Head.*		1500

A Reaſonable Valuation of the Plantation.

500 *Acres of Land with all the aforeſaid Buildings, Utenſils, &c. at* 35 *l. per Acre.*	17500
300 *Slaves at* 40 *l. per Head.*	12000
150 *head of Cattle at* 10 *l. per ditto.*	1500
25 *Horſes at* 20 *l. per ditto.*	500
50 *Head of Sheep at* 10 *ſ. per ditto.*	25
The Amount thereof is	£. 31525

Annual Expences required to ſupport this Plantation.

Sallaries, *viz.*	*l.*
The chief Overſeer.	300
The chief Driver.	30
The under Driver.	15
The Key-Keeper.	30
A Servant to take Care of the Plantain Walk.	15
A White Groom.	25
A White Herdſman.	25
A Farrier.	25
The Doctor.	75
The Town Agent.	100
Carried over.	*l.* 640

The

Brought over.		640	
The Book Poſter.		40	
To Salt Proviſions for the white Servants.		100	
To 300 *Quintles of Salt-Fiſh for the Slaves at* 15 *ſ. per Quintle.*	}	225	
To 700 *Buſhels of Oats for the Horſes at* 2*ſ* 6*d. per Buſhel.*	}	87	10
To Cloathing for 300 *Slaves at* 10*ſ. per Head.*	}	150	
To the Tax of their Head at 2*ſ* 6*d. each.*		37	10
To the Parochial Tax of 500 *Acres of Land at* 1*ſ* 3*d. per Acre.*	}	31	5
To Labour ſpent upon the High-ways for the 500 *Acres, as* 50 *Negroes is required to Labour two Days, and is worth* 1*ſ* 3*d. per Day.*	}	6	5
To Tax of two Wind-Mills at 20*ſ each.*		2	
To 500 *Pair of Pots and Jars, Annually at* 3*ſ. per Pair.*	}	75	
To Repairs of Negroes at 5 *l. per* Ct. *upon their Prime Value, or* 5 *per* Ct. *or* 15 *per Annum.*	}	600	
Repairs of Cattle at 10 *l. per* Ct. *upon their Value, or* 10 *l. per* Ct. *or* 15 *l. per* Annum.	}	150	
Carried over.	*l.*	2144	10

Repairs

Brought over.	*l.* 2144	10
Repairs of Horſes at 20 *l. per* Ct. *upon their Value or* 5 *l. per* Annum.	100	

To an Engliſh Invoice, *viz.*

Hoes, Bills, Nails, Holland-Duck for VVind-Mill Sails, Straining-Cloth, Cart-Harneſs, Chains, Crows, Sledges, Skimers, Ladles, Lamps, &c. *all which Neceſſaries we muſt be ſupplied with from* England.	300	
As for Repairs and all other Expences, not provided for herein, ſuch as in Caſe of an Accident to the Crop of Corn, or any other Proviſions and Tradeſmen, viz. *Carpenters, Maſons, Plumers, Blackſmiths, Braziers, Glaziers, Harneſs-Menders,* &c. *and for the better Accommodations,* &c. *I allow*	455	10
Annual Expences.	*l.* 3000	

The Annual Expences as here computed, amounting to 3000 £. and the Value of the Plantation ſuppoſed to be 31525 £. the five Thouſand Pots of Double-clayed Sugar, and forty Thouſand Gallons of Rum ſuppoſed to be Annually made from this Plantation ought to ſell

at

at high Prices to yield a reaſonable clear Profit to the Owner, whoſe conſiderable Expences, many Riſques, and the Calamities, Loſſes, Inconveniences, Labours and Fatigues, neceſſarily attending a Sugar Plantation in this Iſland more eſpecially ; ſhould induce their being kept as free as poſſible from all Duties, Impoſitions and Reſtraints ; for although in ſome Years the clear Profits with Frugality and good Oeconomy may be conſiderable, yet for want of ſeaſonable Weather, and due Care, and proper Supplies, and good Management, many Plantations have proved not worth holding, and there are many diſmal Proſpects of ruinous Buildings in the Iſland, that were at firſt very Commodious, which have by various Accidents been deſtroyed, and only the Land been regarded as of Value by joining to other Eſtates.--- Plantations in this Iſland do not yield near ſo much clear Profit, as thoſe in other Sugar Colonies, which are managed more eaſily, at little Expence, and are more certain in their Produce.

My Reaſon for making ſo large an Allowance upon the Supplies, or Repairs of the Slaves and Stock is, firſt ſuppoſing ſuch a Number to dye Annually, it will require that Supply immediately, or oppreſs the remaining Number, or ſubmit

to

to unſeaſonable Huſbandry, or to depend upon hired Labourers, which moſt certainly will lead you into many Difficulties and Loſſes. But ſuppoſe thoſe Slaves don't dye; it is reaſonable to imagine that they, as well as the Cattle and Horſes muſt be ſo much the worſe: For if every Planter would take an Inventory of the Value of his Slaves the firſt Day of *February*, and again the firſt Day of *November*, he would diſcover that difference at leaſt in the Countenances of 300; and ſo it will admit in Proportion a difference in the Value of the Horſes and Cattle between the firſt Day of *March*, and the laſt Day of *September*. For if we ſee inanimate Things, ſuch as the Utenſils of the Plantation become worſe, though uſed with the greateſt Care in the Hands of the Artificers, how much more muſt the Conſtitutions of the Human and Animal Creatures be impaired: The Slaves in reaping the ripe Crop, nurſing the Young, and planting the enſuing one, and the Stock by the Labour of reaping and carrying it to Market? my Reaſon for allowing ſo little to the ſeveral Tradeſmen is, when a ſet of Works and Buildings are all in Perfection, they will require very little of their Aſſiſtance for many Years, except it is for hanging the Coppers

pers and Stills, and that Expence will require to be repeated every four or five Years, if there is five Thouſand Pots of Sugar Boiled in them.

As for any Accident which every Thing according to its Kind or Nature is ſubject to, that muſt be ſubmitted to, and a Charge made for out of the Neat Proceeds (when it happens) as Profit and Loſs.

If any Objection ſhould ariſe concerning the Number of 50 Pots per Acre with the Addition of the 40 Acres of ſecond Crop to the 100 Acres of firſt Crop Canes, it would be juſt to try that Experiment before it is ſtrongly oppoſed or argued againſt.

If any Obſervation be made upon what I've ſaid of 50 Gallons of Cain-Juice to make a ten Gallon Pot of Sugar, let it be conſidered that it is in the prime Months of *March* and *April*, and not throughout a Crop. I have now ſeveral Journals by me, all which I have carefully looked over, and find upon an Average, that a ten Gallon Pot has taken 63 Gallons in one Year, and in another, 65 Gallons of Liquor; the latter being until the Month of *July* when

 finiſhed

finiſhed, and doubtleſs if we were to keep on working through *Auguſt*, *September*, &c. we may diſcover more conſiderable Loſs. I have been juſt, as well as curious herein.---- If any ſhould object to a 10 Gallon Pot being Double-clayed, to weigh from 48 to 60 lb. of Neat Sugar ; firſt let it be conſidered what it weighs green, then how liable it is to Abuſe in the ſort of Clay and Management of it, and how old it is too, whilſt it is neglected and becomes ſo dry that it admits the Clay Water a ſudden Paſſage, which carries away the Sugar into the Jarrs without much Improvement of the Colour of that it leaves in the Pot. Therefore I inſiſt upon it, that Sugar fairly Tempered, Cleanſed and Boiled, will be fit to receive the Clay in 12 or 15 Days, except you have Potted it colder than neceſſary, which if not extreamly cold, may make it 20 Days, or according to the Degree it was cold : for that in itſelf is an Error without Remedy, eſpecially for Sugar you deſign to clay.

If your Sugar is ſuch as I have deſcribed, and has not been Injured by the Boiler, then the Sugar not being changed truly white, muſt be from ſome Error of the Clayer in the Curing-Houſe, from either the ſort of Clay, the due

Proportion

Proportion of Water, or the due Mixing and Tempering ; for Clay will require many Hours Labour and Pains to incorporate thoroughly before it goes through the Strainer to lay upon the Sugar. And it is my humble Opinion that a Miſcarriage is often owing to the want of Care in this Particular.

The ſeveral Remarks I have herein made, if they are candidly and duly conſidered, will, I humbly preſume to hope, incite the Owners of Eſtates to provide for them effectually in every reſpect, and in ſome Meaſure aſſiſt them, in knowing more readily, when Plantations are well and properly managed.----Prompt chief Overſeers, and all employed in Plantations, to do their reſpective Duties, in the moſt honeſt, faithful, diligent, careful and exact Manner ; and to enlarge and improve on the Hints offer'd in this Treatiſe.---- And if a laudable Emulation can be raiſed in every one to exert himſelf in the beſt Manner he is able, for the Benefit and Improvement of a Sugar Plantation ; poſſibly my Endeavours in this Work, will eſcape all ill-natured, inconſiderate Criticiſms,or any Conceits, that it may be in any Reſpect the leaſt Prejudicial, and may be commended, and my kind generous

nerous Subſcribers, not blame me for what I have here produced to publick View; but ſhould all my own Obſervations be deemed merely Trifling and Inſignificant, ſurely the annexing ſome moſt uſeful excellent Inſtructions, given many Years ago, by HENRY DRAX Eſq; for the Management of his two Plantations in this Iſland, will render my Treatiſe valuable, as thoſe Inſtructions can't be too much admired, conſidered, and practiſed by every worthy good Planter, or Maſter of an Eſtate, and therefore I do with Pleaſure publiſh the Copy I procured of them.

INSTRUC-

INSTRUCTIONS

For the Management of *Drax-Hall*, and the *Iriſh-hope* Plantations :

To *Archibald Johnſon*,

By HENRY DRAX, Eſq;

I Shall inſert ſome general Rules and Obſervations, which I have walked by my ſelf, for the Government of the Family both Whites and Black.

1. In the firſt Place, I muſt enjoin you, and 'tis my poſitive Directions, that every *Sunday*, all the Family of Whites be called in to hear *Morning* and *Evening Prayers* ; and of other Days, if you have Time and Conveniency. Let a Penalty be put on the abſent, either the Forfeiture of their Allowance that Week, or what other, you think fit.

2. On

2. On your firſt entring upon the Eſtate, I would have an exact Inventory taken of all Things on the Plantation, a true Copy of which muſt be ſent me.

3. For your greater Eaſe, and that you may not be taken off from ſolely minding the Plantation Affairs of planting and making Sugar, and that you may have as little Occaſion as poſſible, of being abſent from the Plantation, which I have experimentally found, to be very pernicious to all Proceedings there, every Perſon being more diligent in his Employ, when the Maſter is at home, although he ſtirs not out of his Chamber, than when he is abroad; therefore it muſt be obſerved for a Rule, that you never be abſent from the Plantation, but in Caſe of Neceſſity: I ſay for your greater Eaſe, I have engaged proper Perſons to act in, and do all my Buſineſs in *Bridge-Town*.

4. I hope you will find a ſufficient breeding Stock for the plentiful furniſhing your Table; but if you find there are not ten good breeding Cows, twelve good laying Turkey Hens, eight Muſcovy Ducks, eighteen good Dunghill Hens, all to be kept for a breeding Stock; then I wou'd have you buy of each Sort to make up the Number.

5. It

5. It is my Desire, that not only for the more comfortable Support of your self, and those of my Family as shall eat at Table with you, but also for the Relief of all such, either Whites or Blacks as shall be sick in the Family, that you keep a plentiful Table; for the furnishing of which, I do allow you, the Produce of all the Sheep, Hogs, Turkeys, Dunghill Fowls, Ducks, Pidgeons, &c. none of which shall you ever sell. You must be careful not to be overstocked, especially in Sheep, which are great Tainters, and Destroyers of the Pastures, and consequently very injurious to Cattle; fourteen Ews of the best Sort, will be enough, to keep for breeding, the Ewe Lambs of which must be constantly killed, and the rest made Weathers, and killed as you have Occasion. I wou'd have the Sheep constantly kept at the *Hope-Plantation* for making Dung there.

6. For your Supply of *Maderia* Wine, Salt, Spice, Oatmeal, salt Provisions, and other Necessaries that must be bought for House-keeping, I do not think fit to stint you, being confident of your Moderation and careful Frugality in the Use of them; besides, I know not what Occasion there may be, of more than ordinary Expences

pences for drenching of Horſes and Cattle, and for the Relief of ſick People, whom I earneſtly deſire may not want any Thing that's fit for them; the Kitchen being more uſeful in raiſing and recovering of Negroes in moſt Diſtempers than the Apothecary's Shop; they do well together, but Phyſick alone without proper Care, and the Help of what the Kitchen affords, does rather injure or deſtroy, than aſſiſt Nature, but I have ſo great a Confidence in your more than ordinary Care in this Particular, that I ſhall not further enlarge upon it.

7. For your Supply of Beer, I ſhall give Directions that twice or thrice every Year two Hogſheads of the beſt Strong Beer be ſent you from *London*.

8. My Attorneys muſt be invited by you to view the Plantations once a Year, when they muſt be well entertained, and you muſt deſire them carefully to inſpect every Thing, and ſhew them all Accounts relating to Plantation-affairs, and acquaint them with all your Schemes and Intentions for the Management and Improvement of the Eſtate, and their Directions and Advice I would have you to obſerve and follow.

9. I

9. I wou'd have to eat at the Table with you, the Perſon who keeps the general Waſte-book and Account of making and diſpatching of Rum: The Doctor ; the chief Accomptant or Book-Keeper ; and alſo the Head-Curer.

10. You muſt ſometimes, the oftner the better, call your white Overſeers together, to adviſe and diſcourſe them about the Plantation-Affairs ; as about what Pieces of Canes or Corn &c. do moſt want Weeding ; what is the next propereſt Work to fall on ; how Canes or Proviſions ſtand in ſuch a Piece or Part of the Plantation ; whether the Watchers of them do their Duty ; whether there is any Dung to be provided or ſaved ; or what other Queſtions you ſhall think fit to aſk them. Beſides, the Advantage you'l receive in hearing their ſeveral Opinions, it may give you Information of ſome Things, which otherwiſe you might have been ignorant of, and certainly bring ſeveral Matters into your Remembrance. You'l by this Means improve all their Judgments in the Affairs of the Plantation, and make them far more diligent than they would otherwiſe have been.

11. It will be neceſſary to encourage the white Servants according to their Merits, either

by an extraordinary Allowance of Cloaths or Proviſions, or if you ſee Cauſe, of ſome Wages.

12. The Doctor muſt be very ſkilful, diligent, and humane, for the utmoſt Care ſhould be taken of all the Sick, many of whom will yearly die if they want good Kitchen Phyſick, and good looking after.

13. You muſt never puniſh to gratify Anger or Paſſion, the End of Puniſhments being to reclaim the Malefactor, and to terrify others from committing the like Faults. A wiſe prudent Man will not be paſſionate, to Servants eſpecially, for a paſſionate Man is not fit to judge or to command.

14. Be ſtrict in puniſhing all Vice, eſpecially Drunkenneſs, which is frequently the Original of all others, and it is a Vice the Whites are much addicted to; the Stocks or laying them Neck and Heels till they are ſober and ſenſible of their Faults, I have obſerved to be the propereſt Puniſhment for the Crime, Blows generally enrages a drunken Man and makes him fit for any Miſchief.

15. If at any Time you take Notice of a Fault you

you deſign to puniſh, let it be immediately executed, eſpecially upon Negroes, many of them chuſing to kill themſelves to avoid Correction.

16. The Blacks are commonly addicted to Thieving; if it be for their Belly, it is the more excuſable, but I hope none of mine will ever have Occaſion to be Thieves for Want; but if at any Time they are taken ſtealing Sugar, Molaſſes, or Rum, they muſt be ſeverely handled.

17. There muſt be the greateſt Care imaginable taken to preſerve all Portable Things from being ſtolen.

18. The Curer has a very great Truſt committed to his Charge, therefore you muſt be very careful to employ not only a ſkilful and diligent Man, but alſo one that's ſober and honeſt. In order to keep him ſo, he ſhould be above converſing with the ordinary Servants, for which reaſon I wou'd have him eat at Table with you, by which Means alſo you'l have a more frequent Opportunity of diſcourſing with him, and giving him Directions about his Buſineſs. You muſt frequently view his Accounts, alſo daily ſee all his Sugar in every Bay. This Diligence of yours will make him fearful of erring by Neglect

Neglect or otherwiſe, well knowing it muſt be diſcovered. The Curer muſt take particular Care to have all the Pots prick'd in the Boiling-Houſe before brought into the Curing-Houſe ; he muſt look to the Jarrs the Pots are ſet on, that they be both tight and very ſweet ; in ſetting them up to ſort the high boiled Pots from the low, and if there happens to be any very bad Pots in the Parcel to put them by themſelves ; but I hope by your Care in the Boiling-Houſe ſuch Miſtakes will ſeldom happen. The Sugar being good and boiled to it's true Heighth, will be ready to break and level in five or ſix Days Time, which muſt not be neglected, for the ſooner it is knocked out, the ſooner it will be Shipped, and the Pots ready to fill again.--- There muſt great Care be taken in ſetting the Pots level and right for claying, and emptying all the Jarrs of the Molaſſes, that every Pot may have it's empty Jarr to purge into after being clayed. For ſuch Sugar as happens to be high boiled or bad, you muſt judge of the time of claying by knocking the Pots out, and if you find them purge three Quarters through, you may immediately level and clay them. As ſoon as the firſt Clay is dry, take it off, and let the Sugar the ſecond Time be levelled. You muſt

chuſe

chuſe for claying Sugar a ſtiff Clay, and ſuch as ſhall be free from Gravel, Earth, &c. The Negroes muſt work the Clay well and ſtrain it through a Cullender, and make it either a thiner or thicker Batter according to the Firmneſs or Softneſs of the Sugar that it's to be laid on. If the Sugar be ſtrong and high boiled, it will endure a very thin Batter. Obſerve for a Rule, that all Sugars whatſoever be clayed both Muſcovado and Paneels, except ſome Paneels prove bad and too weak to bear a Clay, in ſuch Caſe you muſt only Sun dry ſuch Sugar to pay away. For the Time of knocking out Sugar there is no certain Rule; the uſual Time is about ſix Weeks or two Months after claying, but the beſt Way to be certain, is to knock out ſeveral Pots of thoſe Bays that are oldeſt, and if you find it clear to the Bottom, it's fit to be knock'd out. In knocking out, there muſt be great Care taken, if the Sugar comes out with Difficulty, as it generally does from new Pots; it muſt be knocked out upon Canvis quilted for that Purpoſe, and Sometimes dug out to preſerve the Pot from breaking. Let your clayed Muſcovado be ſorted into three or four Sorts according to the Goodneſs of it, in which your Head-Curer muſt be very nice and exact, eſpecially of the white Sorts:

and

and Paneels into two Sorts, and afterwards very well dryed, for which Purpoſe you'l find Conveniencies to dry five thouſand Pounds Wt. a Day. It will be the Curers Care to ſee the Caſks he packs the Sugar in, be ſtrong and clean; he muſt be exact in tareing the Caſks, which Tare muſt be put on ſeveral parts of the Caſk with Chalk. Let every Sort of Sugar be weighed in Bags as it is brought from the *Barbacue*, which Weight muſt be put in a Book kept for that Purpoſe, as alſo all Sugar daily knock'd out; what Number of Pots; that your knocking out may agree with your weekly Receipts of Pots. Your Curer muſt be very careful in Packing, that he makes no Miſtakes or falſe Package. Let the Sugar both by ramming and ſhaking the Caſk be as cloſe packed as poſſible. Beſides, comparing the Sorts in packing, the ſeveral Sorts muſt be expreſſed with Chalk on the Outſides of the Caſk. Let all the Sugar (except the Paneels that's bad) be packed up in Caſks at the Plantation, and fitted for Shipping before it be ſent to the Bridge. As ſoon as the Caſks are filled, let them be headed up and number'd, and immediately Weighed and Tared, and the Sort of Sugar contained in each Caſk muſt be immediately enter'd in a Book kept for that Purpoſe

poſe. This the Curer muſt have a particular Charge to be careful in, that there be no Difference in the Weights when the Sugar arrives at *London*. As the Sugars are carted to the Bridge, let the Number be expreſſed in the Book, that you may at any Time know what is ſent down. ---All Sugar Pots, Jarrs, and all other Neceſſaries belonging to the Curing-Houſe, muſt be delivered to the Curer by Inventory, for which he muſt be accountable as follows ; for all Pots or Jarrs he delivers out to the Boiling-Houſe, or for any other Uſe, he muſt charge the Head-Boilers, or other Perſons, who muſt when that Occaſion is ſerv'd for which they were deliver'd, return them again, and be diſcharged. Theſe Accounts muſt be kept in a Book, in which muſt be inſerted all that are broken, the Day when, and by what Accident.

19. For the better Preſervation of Plantation Tools and Neceſſaries, I would have a Room ſet apart on Purpoſe to keep them in, which muſt be divided into ſmall Partitions, for the more orderly keeping each ſort apart. In this Room, where all thoſe Neceſſaries are kept, there muſt be an exact Account of what's delivered out of this Store for Uſe, as Hoes, Crows,

Wedges

Wedges for ſplitting Wood, or Stone Axes, Hatchets, Croſscut-Saws, Skimmers, Baſons, Ladles, Straining-Cloths, and all other of the Plantation Neceſſaries. Whatever is in this Store, charge one of your White-Servants that can Write with, who, in ſome Book, where a Liſt of the ſame Things muſt be kept, muſt mention, what White or Black by Name, he delivers any of theſe Particulars to; which when return'd back, muſt be expreſſed at the End of every Line, but if not returned, then the ſaid white Receiver, muſt immediately acquaint you therewith, that you may enquire into the Matter. The oftner you inſpect all theſe Accounts, the more careful you will make the Parties concerned. All Tradeſmen's-Tools, with other Things not before mentioned, have formerly been kept in the Store-Houſe, by the Book-keeper, and the ſeveral Perſons concern'd, charged with all Things deliver'd, who are accountable for the ſame.

20. Be ſure you keep all the Houſes in the Plantations in good Repair, as a ſhort Neglect in this, will treble the Charge and Trouble.--- You muſt take ſuch convenient Opportunities to Repair or erect Buildings, as not to neglect even

even one Days Work, in either Planting, Weeding, making of Sugar &c.---You ſhould take a convenient Time when Veſſels arrive from St. *Lucia*, and Timber is cheap, to ſtore your ſelf. ---Timbers kept in the Plantations as a Reſerve, muſt be Houſed and kept dry,and often viewed, leſt the Wood-Lice get to them, as they at Times do much Damage to Timber, eſpecially to Locuſt and Sweet-Wood.----I would have no Timber bought except on abſolute Neceſſity, or that you can meet with it very cheap.--- Preſerve the young Maſtick Trees for making Mill-points, as they anſwer this Uſe very well.---- You ſhould always have a good Stock of Laths lying by you Seaſoning, to be ready on Occaſion. Sweet-Wood hath generally been made uſe of in this Plantation: You muſt try ſmooth and ſtrait Grain Maſtick, which I believe may do well for Laths.---- Have always ready at each Plantation for fear of any Accident by Fire, one long Ladder, and two or three ſhorter, theſe may be hung againſt the Wall to the leeward Side of the Stoke-Holes at the Hope, where under the Eves they'll be preſerved dry, and in the old Cattle-Mill at *Drax-Hall* Plantation. Let it be a Rule that whoever takes them from thence for any Uſe, that they return them back again.

21. You muſt be very careful in the Choice of your Field Overſeers, who muſt beſides having a good Command, be very active, diligent, and ingenious, if poſſible, honeſt; Negroes ſo qualified under your Directions, will quickly make able Overſeers, as it will be your Part to ſee that there be not too much Severity, or Lenity uſed by them. Negroes upon their firſt having a Command are very apt to be ſevere, which muſt be ſtrictly guarded againſt, for I have found it eaſier to abate the Courage of obſtinate Fellows, than to raiſe the Spirits of one that hath been dejected by hard or ſevere Uſage.---There muſt alſo be great Care taken to prevent Partiality in the black Overſeers.

22. There muſt be eſpecial Care taken in working the Hands, that every Negro doth his Part according to his Ability, the weak Hands muſt not be preſſed, nor the Strong ſuffered to ſhrink from their Work. Many Negroes will be apt to Lurk and Meech from their Work, without great Care be taken to prevent it.

23. The beſt Way that I know of to prevent Idleneſs, and to make the Negroes do their Work properly, will be upon the change of Work, conſtantly to Gang all the Negroes in the Plantations in the Time of Planting. All the

Men

Men Negroes into two Gangs, the ableſt and beſt by themſelves for Holeing and the ſtronger Work, and the more ordinary Negroes in a Gang for Dunging, &c. The Women Negroes alſo into two Gangs as before, and the leſſer Negroes into two Gangs, the leaſt to be followed by ſome careful old Woman, who muſt uſe them with Gentleneſs. Out of theſe ſix Gangs of Negroes muſt the Carters, Stillers, Curing-Houſe Negroes, Cooks, Lookers after Stock, Watchers of Proviſions, &c. be drawn. Your Under-Overſeer muſt conſtantly have a Liſt of the Gang under his particular Care, that he may be able to give a particular Account of every one, whether Sick or how employed. In the Time of grinding Canes after your Watches for your Mills, Boiling-Houſe, and Cane-cutting Gangs are taken out, all the reſt of the Negroes, except the ſmalleſt Gangs, muſt be Liſted into a running Gang for getting Home and Houſeing all ſorts of Fuel. The Reaſon why all the Negroes are to be Liſted is, becauſe other Employments are uncertain, and when there is no Occaſion for Negroes to be in the Still-Houſe, Curing-Houſe, &c. then they muſt conſtantly make their Appearance in the running Gang, of which when the Number is great, it will be neceſſary to have two Overſeers, and the able Negroes

groes divided from the weaker. This Method will be moſt effectual to prevent lazy Negroes abſenting from their Work.----I had commonly every Fortnight, and ſometimes oftner, a Liſt brought me where every Negro in the Plantation was employed; which Cuſtom will be for your Eaſe and Satisfaction to continue.

24. For the enabling Negroes to go through their Work with Chearfulneſs, there muſt be great Care taken that they have Plantation Proviſions enough, beſides the conſtant Proviſion-Ground of their own. The Quantity and the moſt convenient Place for the Negroes Gardens you muſt allot, which ſhould be in the out Skirts of the Plantation. Beſides enough of Plantation Proviſions, which the Negroes muſt not by any Means want for their moſt comfortable Support; every Negro muſt have Weekly, one Pound of Fiſh or Mackrel. Overſeers and Head-Boilers muſt have double that Allowance: And every Negro muſt have two Quarts of Molaſſes Weekly, or more if needful: and twice or thrice a Year or oftner if you ſee Occaſion, when Tobacco is cheap, two or three Hundred Weight muſt be bought and diſtributed amongſt all the Negroes, who muſt be furniſhed with Salt whenever they want it. Twice or thrice a Year

give

give a Barrel of Palm-Oyl if eaſily to be procured, amongſt them. Once every Year ſupply the Men-Slaves with Drawers, Shirts, Jackets and Monmouth Caps; and the Women with Petticoats, Jackets and red Caps. For Encouragement to particular Negroes, give what you think fit. In wet Weather give Rum to each Negro every Morning; and at other Times as you ſhall ſee convenient, according to their early Riſing, or the Work they are about.

25. If you don't find a ſufficient Number of working Negroes to carry on conveniently the Buſineſs of the Plantations to the Heighth, you muſt prudently buy a proper Number at a Time; I do not think it at all profitable to buy Lot Negroes. I ſuppoſe to ſupply the Place of thoſe that ſhall be decayed or dye, you'l want a Yearly Recruit of ten or fifteen, or it may be (if by any contagious Diſtemper there happens a great Mortality, which I beſeech the great GOD of his Mercy to keep you from) twenty or more may be wanting, which muſt be ſupplied. Let all you buy, be choice young Negroes who will be fit for preſent Service. I have obſerv'd the Caramantines, and Gold-Coaſt Slaves, have always ſtood and proved beſt on my Plantations, therefore you'l do well rather to buy thoſe than of any other Sorts.

26.

26. The Horſes you'l find on the Plantations, with thoſe you carry with you, will I hope, be ſufficient to make up two good Teams ; if not, by buying theſe make up at leaſt that Number, which I ſuppoſe will (beſides working on Occaſion in the Plantations) be ſufficient to carry down all my Sugar to *Bridge-Town* : Horſes, if ſober careful Men do not attend them, are incident to many Caſualties.

27. You know very well the Neceſſity of a good Stock of working Cattle for carrying on the Plantation-Buſineſs ; and that no Cattle do ſo well on my Plantations, as thoſe bred on them, therefore there muſt be eſpecial Care taken in the raiſing of Calves. I have obſerv'd, that the beſt Way is to let them run with the Cows, and have all the Milk, by which Means they become more hardy and large ; therefore I wou'd not have above three Cows kept for the Pail ; the reſt for breeding, which ſometimes when they are not big, or have Calves ſucking, may alſo in Caſe of Neceſſity be work'd. I wou'd have a good Bull kept for the Cows. I have obſerv'd if Cattle have Food enough, they can't be over work'd, eſpecially in the dry Time when the Roads are good, therefore muſt enjoin you to be extraordinary careful of having

all

all the Cattle kept in good Paſtures all Day, and fully Meated at Night, eſpecially the working Cattle, which ought to have Corn allowed them, particularly in the wet Time of the Year ; there is a great Conveniency by feeding of Cattle with Cane-tops, Abundance of which on the Pens, makes a great Quantity of good Dung. When you have decayed Cattle that are old and paſt Labour, I wou'd either have you feed them or ſell to the Butchers (at which Time you may reſerve a roaſting Piece for your own Uſe) or in Caſe you can't conveniently feed them, you may ſell them lean, but put none forth to the halfs.-- A ſure Way to know when Cattle are well and ſufficiently Meated at Night is, when you find Cane-tops next Morning in ſeveral Parts of the Pen untouch'd ; if Cattle are Neglected they will dye of the Murrain, which follows Poverty and Hunger in Cattle.

28. Beſides your particular Care of viſiting the Stable frequently when the Horſes are at home, you muſt have an eſpecial Care to get honeſt and able Carters, whom as much as may be, muſt be kept from the Acquaintance of Carters on the Road, who are generally very idle Fellows, and apt to ſpoil by their bad Examples, thoſe that otherwiſe would be honeſt.

29. You

29. You will find the Aſſes uſeful to you on many Occaſions, eſpecially for bringing Wood up the Hill into Places proper for the Carts. Great Care muſt be taken of the Aſſes, and diligent and ſkilful Drivers provided for them.

30. For the beginning of the Crop you muſt lay Mold 1 & ½ Foot thick all over the Hole, that is every Year made Uſe of for that Purpoſe adjoining to the Still-Houſe, over which ſpread the Aſhes from the Stoke-Holes, and let into it the Liquor from the Stills when no longer fit to be return'd into the Ciſtern, which Liquor when it has overflown the whole Place, and lain ſo two Months, the Dung ſhould be taken out and laid into a convenient Place for Carts to load; thus by twice digging, the Earth and Aſhes will be very well mixed together. This by certain Experience I know to be excellent Manure for Canes, and being repeated three or four Times a Year, will produce great Quantities of Dung, which if you have time ſhould be carted into the Pieces you intend to uſe it in, before the Extremity of the wet Weather comes in, at which Time neither the Cattle or Horſes can do half as much even with double toiling; and for the greateſt eaſe of Carting, all the bad Places in the moſt uſed broad Paths of the Plantation, ſhould

at

at convenient Times be well mended with great Stones, or what other Way you ſhall think moſt convenient.

31. Your next Care muſt be to produce good Plants, of which you muſt have for both Plantations at leaſt Twenty Acres every Year; for this you muſt make uſe of the beſt and neweſt Land in the remote Parts of both Plantations.

32. There is no producing good Canes without dunging every Hole, therefore it muſt be one of your chiefeſt Cares to provide ſufficient Quantities of Dung every Year. At *Drax-Hall* you'l ſeldom want Dung for thoſe Pieces that lye nigh the Work, for beſides the Still-Houſe and Stables, the Cattle fed at home, where are alſo Hogſtyes, which Places by often Traſhing will afford much Dung; and for remote Pieces, I would have a Lime-kiln built at the Bottom of the old Houſe, that being nigh great Quantities of Stone and the greateſt Part of the Wood, where you may burn Lime very eaſily, which being carried to the Land where you intend to uſe it, and there mix'd in a Bed with Bottom Earth, or rather Loom (which is to be found in many Bottoms) where it is to lye ſome Time till it be diſſolved, and the Loom become mellow. I am told and am very confident, this

Method will make very excellent Manure for Land, and the cheapeſt you can uſe for Land that lies at a Diſtance from the Works. This Conveniency you'l want at the *Hope*, there being little or no Wood, which muſt therefore be otherways ſupplied by your Induſtry.

33. I do ſuppoſe two Hundred Acres of Canes to be as little as you ought to plant well in both Plantations every Year; the beſt Way for planting according to my Obſervation, is in Rows of four Feet and half Diſtance; this Space betwixt the Rows will give the Holers Room enough to make large and deep Holes, which muſt be conſtantly done.

34. The Dung-Carriers are to lay a large Box or Baſket well heaped up with Dung betwixt every two Holes, which by the Planters, after they have prepared a good Bed in the Bottom of each Hole, and carefully placed the Plants, muſt equally divide and ſpread over the Plants of the two adjoining Holes, which muſt again be cover'd ſlightly with Mold.

35. In the planting Bottoms you muſt obſerve to raiſe Beds of every two Rows of Canes, by which Means there will be Gutters to convey the Water to the Trench that muſt lead to the Hole

Hole you have dug in the lower Part of the Bottom amongſt the Rocks for the drawing the Water off; without this Courſe be taken you'l not get Canes to grow in Bottoms, which generally is the beſt Land.

36. The Planters muſt obſerve at firſt planting (eſpecially if the Seaſon be very wet) not to cover their Plants too thick, which often kills or choaks the Plants, and when they are in a flat or level Piece of Land where the Water doth not quickly drain off, they muſt be directed to make the Bed to lay the Plants on, at leaſt level with the Top of the Earth, otherwiſe if the Plants be not quite killed, they will be ſo chilled with the Water that lies in the Hole, that the Cane will never thrive.

37. After you have taken Care to Hole, dung, and plant well, it will be Labour loſt, unleſs you take Care to keep the Land clean; therefore let it be obſerved for a Rule, that rather than let the Weeds in any Part of the Plantation run to ripe Seed, that you leave all Works whatever and go to weeding; one Month's Neglect thereof will double your Labour, and eſpecially in Proviſion-Land.

38. In weeding of young Canes after they are well come up, I have found it very beneficial to draw

draw the Banks of Mold and Traſh that lie between the Rows over the Stocks of the Canes; there muſt be Care taken they be cut very cloſe to the Ground, eſpecially ſuch as you let ſtand for another Crop, otherwiſe they'l ſpring up too thick, and come to nothing but Traſh.

39. Before you begin to grind Canes be careful to have all the Mills well fixed, beſides which, there ſhould be a ſpare Sett of Points and Arms well fixed and tarred at each Work, lying by to be ready on Occaſion; alſo you muſt have ſpare Coggs for the Mills, and at leaſt one ſpare Sett of Sails to change upon Occaſion, if thoſe up ſhould want mending, by doing of which in Time, the Sails will be much preſerv'd and laſt much longer.

40. Be ſure that all Beds of the Mills, Ciſterns, and Gutters be very tight, which muſt be kept very ſweet and clean, whilſt you are at work, by often waſhing and ſcalding to avoid tainting the Liquor.

41. You muſt be ſure to place at the Mills, ſuch Feeders, as by their Care, Diligence and Skill, ſhall make the beſt Uſe of the Wind, ſo as not to looſe, if poſſible, the Opportunity of grinding a Cane, for if the Feeders do their Part, all the other Negroes belonging to the Work muſt

do

do theirs, therefore you muſt have for each Work a diligent Overſeer of the Mills, who beſides ſeeing all the Negroes do their Duty, muſt be very careful to keep the Mills in the Wind, the Sails in good Trim, and the Gudgeons, Shafts, Collars, and Coggs very well greaſed, of which you muſt never be unprovided.

42. If there be never ſo great Diligence uſed to provide a great Crop, yet if there is either Neglect, or Want of Skill in the Boiling-Houſe, the Profit will be little, therefore the greateſt Care imaginable muſt be there uſed, and the moſt of your Time be there ſpent. It is the chief Part of a good Planter to be well ſkilled in the beſt Method of diſpatching and making great Weeks Works, and alſo in true tempering, cleaning, and ordering the Liquor for making good Sugar.

43. Be careful before you begin to Work that every Thing be in good Order in the Boiling-Houſe; the Coppers all well hung and in good Repair, and well faced with Lead, which muſt be very thick: That your Coolers, Baſons, Skimers and Ladles are in good Repair.

44. You muſt provide good Store of Fuel againſt you begin. Lime enough for the Crop, and

and all the Aſhes you can ſave or procure from the Pot-Houſe.

45. All the Coppers and Leaden Beds muſt be ſcowered and waſhed clean, and ſo kept by ſcowering and ſcraping as often as you have Occaſion.

46. There muſt be Care taken in clarifying, that the Liquor has its due tempering; if there be a Miſtake in the clarifying, it is hard to be rectified in the reſt of the Coppers, therefore the Head-Boiler of each Work muſt have a particular Care of clarifying, and upon their Neglect to be ſeverely puniſhed.

47. The Coppers being well hung, if you have good Fuel, each Copper will require a Negro, who muſt be very diligent and induſtrious to ſkim every Copper as the Liquor paſſes along to the ſkipping Tatches. If the Liquor hath its due Proportion of Temper at firſt, and the Coppers boil well, by often beating the Liquor down, the Filth will riſe, that the Syrrup may be made very clean, without daſhing of Temper in the ſmaller Coppers, which the Negroes cannot diſcreetly uſe, therefore muſt never be done, without your ſelf, or the Head-boiler finds it neceſſary. When it comes to the third Copper from the ſkipping Tatch, the Liquor muſt be well ſtrain'd,

ſtrain'd, and by all Means be made clean, otherwiſe it will never purge well and turn white under Clay. In the Skipping there muſt be great Care in the exact Heighth ; if it happens to be low there is great loſs, an error on the other ſide is more excuſable ; the greateſt Inconveniency of being a little too high is, that the Sugar will take a little longer Time in curing.

48. The Head-boiler's Care will be alſo to ſee the Sugar potted in due Time, if it is potted ſomewhat too hot it may be remedied by ſtiring in the Pot, the Inconveniency of potting cold is without Remedy, therefore not to be ſuffer'd.

49. It will be the Potters Care to have all the Pots very well waſhed, and if new, well ſoaked, and juſt before the potting to wet the Inſide very well with Temper, otherwiſe the Pot will be in great Danger of breaking by the difficult knocking out of the Sugar.

50. As ſoon as the Sugar in Pots is grown cold and hard, it muſt immediately be ſet on Jarrs, the Neglect of which will be injurious to the Sugar.

51. It will be convenient every Morning to clear the Boiling-Houſe by carrying all the Pots of Sugar that have been ſet upon Jarrs into the Curing-Houſe.

52. All

52. All Negroes being much addicted to Stealing, to prevent their pilfering Sugar or Molaſſes out of the Boiling-Houſe, the Overſeer of each Work ſhould conſtantly keep the Door ſhut and the Key in his Pocket, more eſpecially if he is obliged to be out of the Boiling-Houſe.

53. When you are at full Work, return the Skimmings of the Tatches and adjoining Coppers into the Clarifiers, but if the Mill furniſh Liquor but for Part of the Coppers, you muſt clarify and boil the Skimmings by themſelves, or with Molaſſes. The Skimmings of the great Coppers muſt be thrown down to the Still-Houſe; the Gutters that lead to the Still-Houſe muſt be kept in good Repair, and very often in the Time of working inſpected, leaſt they ſhould be ſtopped, which by Reaſon of thick Skimmings from the Clarifiers that are flung down, is very apt to be done.

54. The Wood Stokers who have moſt leiſure ſhould be charged with keeping the Gutters leading to the Still-Houſe clean and open, and puniſhed if not careful.

55. The Still-Houſe if well taken Care of, brings very conſiderable Profit with little charge, therefore muſt be diligently minded. I hope you will find the Still-Houſes well fitted with Ciſterns,

terns, Stills, Worms, Pumps, Gutters, and all other Neceſſaries, all which muſt be conſtantly kept in good Order and well fixed.

56. Your Stillers muſt not only be ſkilful in the quick preparing and fitting the Liquor, but muſt be alſo very diligent to take it at the exact Time, and active in running it off with great Expedition. It is by this Means that great Quantities of Rum is made. If at any Time you have a Servant that's fit to undertake the important Charge of an able Diſtiller, it will be neceſſary that you allow him ſome yearly Sum for his Encouragement according to his Merit. All Neceſſaries belonging to the Still-Houſe, as Tubs, Pails, Anchors, with all other Caſks and Jarrs, are to be delivered to the Charge of the Stiller, who is to be accountable for them in like Manner as the Curer.

57. As the Rum is daily ſent up, let an exact Account be kept of it in a Tally, and every Week the Stiller muſt take the Rum-Keeper's Receipt in a Book, which is to be kept for that Purpoſe. Let the Rum be diſpoſed of, and an Account kept thereof.

58. Your Stiller muſt obſerve for a Rule, that if at any Time he hath Occaſion to be abſent or aſleep, he then have the Still-Houſe Door locked and the Key in his Pocket to prevent the Ne-

groes thieving, which they never miſs any Opportunity of doing.

59. After the firſt Crop Canes are all broke, which if poſſible, ſhould be finiſhed before the wet Seaſons ſet in, and all Proviſion Land cleaned and planted; the next Work muſt be to fit the Cane Land for planting, and prepare Dung. The remote pieces that will be leaſt dung'd ought to be firſt planted, that they may have all the timely Seaſons to grow in. After your firſt Crop Canes are finiſhed your ſecond Crop may be played with, ſo that you ought not to neglect the proper Seaſon for planting, for the Sake of making a little Sugar at ſo great a Diſadvantage as you muſt do, if you work in wet Weather; beſides, there is no great Fear of having ſufficient Intervals of dry Weather, during the Seaſons of Rain, as to give you an Opportunity to run out your ſecond Crop, but if it ſhou'd happen otherwiſe, I ſhall not think it a Diſadvantage, except you ſhould want the Land for planting, or the Pieces lye ſo, that it will much diſorder the Method you have deſigned, to have forty or fifty Acres of ſecond Crop left to begin the next Crop with.

60. The Ciſtern for receiving Molaſſes muſt be kept very clean and ſweet, and the Molaſſes boiled up, if poſſible, every Week. If by grinding you are hinder'd of that, you muſt boil it as often

often as you poſſibly can with conveniency, for the freſher the Syrrups are the better will the Paneels be.

61. When you have Time, let every Sugar-Pot be well hoop'd; to keep the Hoops on, they ſhould with Monjack boiled up with Lamp-Oyl to a convenient Heighth, be daubed over.

62. You will conſtantly have Occaſion for four Wain Tumbrels, and two Horſe Tumbrels, one Horſe Cart and a Waggon, for the Plantation Uſe, which muſt be conſtantly kept in good Repair; and when not in Uſe, be houſed. For the continual maintaining of theſe, you muſt have two Pair of Wheels lying by ready fitted, Velloes, Spokes, and Axle-trees ready hewn for five or ſix Pair more; and ſome Quantity of Timber fit for Cart Spokes will be much wanting.

63. If the Moon ſhines in the beginning of the Night, diſpatch your Carts about 3 o'Clock in the Afternoon; and if it ſhines the latter Part of the Night, diſpatch them from the Plantation about 2 in the Morning, by which Means, they will avoid the Heat of the Day in their Travelling, which certainly is deſtructive both to the Horſes and Cattle, and may prevent the Acquaintance with bad Carters.

64. To keep your Carters in better Awe, it will be convenient ſometimes to ſet a Spy over them,

them, and if you hear they loiter at any Houſe by the Way, or of any other Miſconduct, then puniſh them moderately and prudently according to the Nature of the Crime, by which Means they will be more fearful of offending: but if they approve themſelves to be careful and diligent, give them all proper Encouragement.

65. I would have all my Rum ſent to Town, and none ſold at the Plantation, except on Account of Workmen that belong to the Plantation; and would have all Neceſſaries for the Eſtate bought by the Town Agent, therefore ſend to him on all Occaſions for what you want; he will alſo ſhip and diſpoſe of all my Sugars, which muſt be ſent to him, and none ſold at the Plantation, only if you ſhould at any Time have Occaſion to buy any Plantation Proviſions (which I hope will happen very rarely) which will be more convenient for you to buy to ſave Carriage, and ſhould be bought as near home as poſſible. For paying for Proviſions and all Workmen, you may have Occaſion to employ in the Plantations, my Town Agent will furniſh you with Money. A particular exact Account muſt conſtantly be ſent you by the Town Agent of all he receives from, and ſends to the Plantations with the Prices of each Article, and of all other Particulars neceſſary to be known, and each Particular muſt be

be regularly entered in a Book to be kept at the Plantation for your Diſcharge, and as a Charge upon him.

66. It is my Advice, that you yearly put ſome remote Cane Fields of *Drax Hall* Plantation into Potatoes, which being well traſh'd, ſeldom fails of producing great Quantities of Potatoes. At the *Hope* Plantation put ſome remote Cane piece into *Bonavis*, which being dung'd (beſides the Advantage of the Pulſe) will ſo fit the Land for Canes againſt another Year, as to make it produce good Canes with indifferent Dunging.

67. When you want Fuel, I would have you cut the Wood and Buſhes adjoining to the old Plantain Walk, ſome Quantity of which Land, I would have planted with Plantain Trees, in doing which, you muſt obſerve to take the Plants from the Stalks of ſmall Plantains, that being a better Sort, and will produce the larger Bunches. Plantains is a Proviſion the Negroes much delight in, and is a very wholeſome Food, eſpecially in Fluxes, and they produce greatly in the Years when there are no very high Winds.

68. As all Sorts of Proviſions are ſubject to Caſualties, ſome will be deſtroyed by Worms and Flies, and all by long Droughts, therefore 'tis my poſitive Directions, that you have conſtantly a Reſerve of ten or fifteen Acres of Caſavy, for fear of

of other Proviſions failing, that being more certain, and will lie four or five Years in the Ground, and ſtill improve, and therefore to be depended on. Your Caſavy Pieces ſhould be near the Plantain Walk, that one Watch may look after both. Obſerve for a Rule, that as you dig the Caſavy, conſtantly to plant the Land again, by which Means you'l never want.

69. There muſt be Care taken to plant all the Land you can, with Corn, without which neither Horſes or Cattle will be able to perform their Work; and when there is no Want of Corn, every Thing in the Plantation will be fat, it being very good Food for the Negroes.

70. Whenever you plant Corn among Canes, obſerve to plant the Rows at double Diſtance, eſpecially if you plant *Guinea* Corn among Canes, in which Caſe you muſt always take Care to thin it, and not to ſuffer above two or three Stalks at moſt to grow from one Hole, otherwiſe it will much prejudice the Canes.

71. There are ſome Pieces in the Out-ſkirts of the Plantation rocky, barren, and fit for little, but *Guinea* Corn, which after the Corn is gathered affords good Paſture, and therefore ſhould be planted if you have Time yearly, but for Want of your being able to do it yearly, you muſt take the beſt Care of it, for ſecond Crop, as *Guinea* Corn produces a good ſecond Crop.

72. After you have fallen Land enough below the Hill, either let your new Land as you fall it, run again to Wood, or plant the like Quantity of Land in ſome other Part with Fiddle-Wood-Trees, which will be no Hindrance for ſome Years, to the planting of it at leaſt with *Guinea* Corn.

73. Let the leeward Side of all Diviſions of Canes be planted with Fiddle-Woods; you muſt obſerve to keep the young Woods for ſome Years after planting clean from Vines, otherwiſe the Growth will be extremely hinder'd, if the Wood is not quite deſtroyed by them.

74. I would have you in your Plantain-Walk, to plant as you can get the Nuts, five hundred or two thouſand Palm-Oyl-Trees, and in the Garden at home the firſt Seaſon that happens, plant five hundred ſower, five hundred ſweet, and five hundred *China* Orange Trees, and forty or fifty Shadocks, which muſt be planted at convenient Diſtances, and in ſtrait and good Order. Plant alſo one hundred Citron-Trees, and one hundred ſower Lemon-Trees of the beſt Kind.

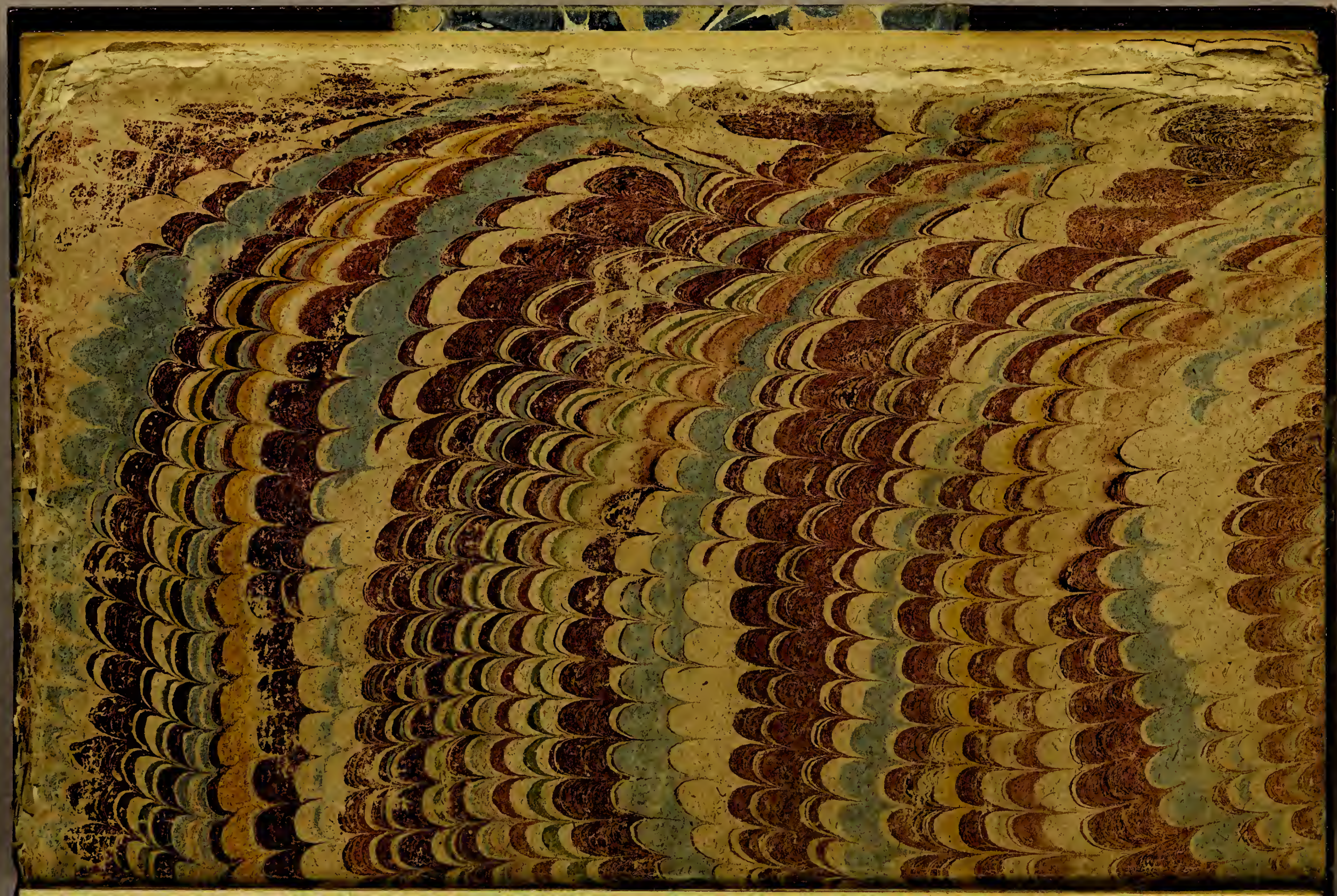
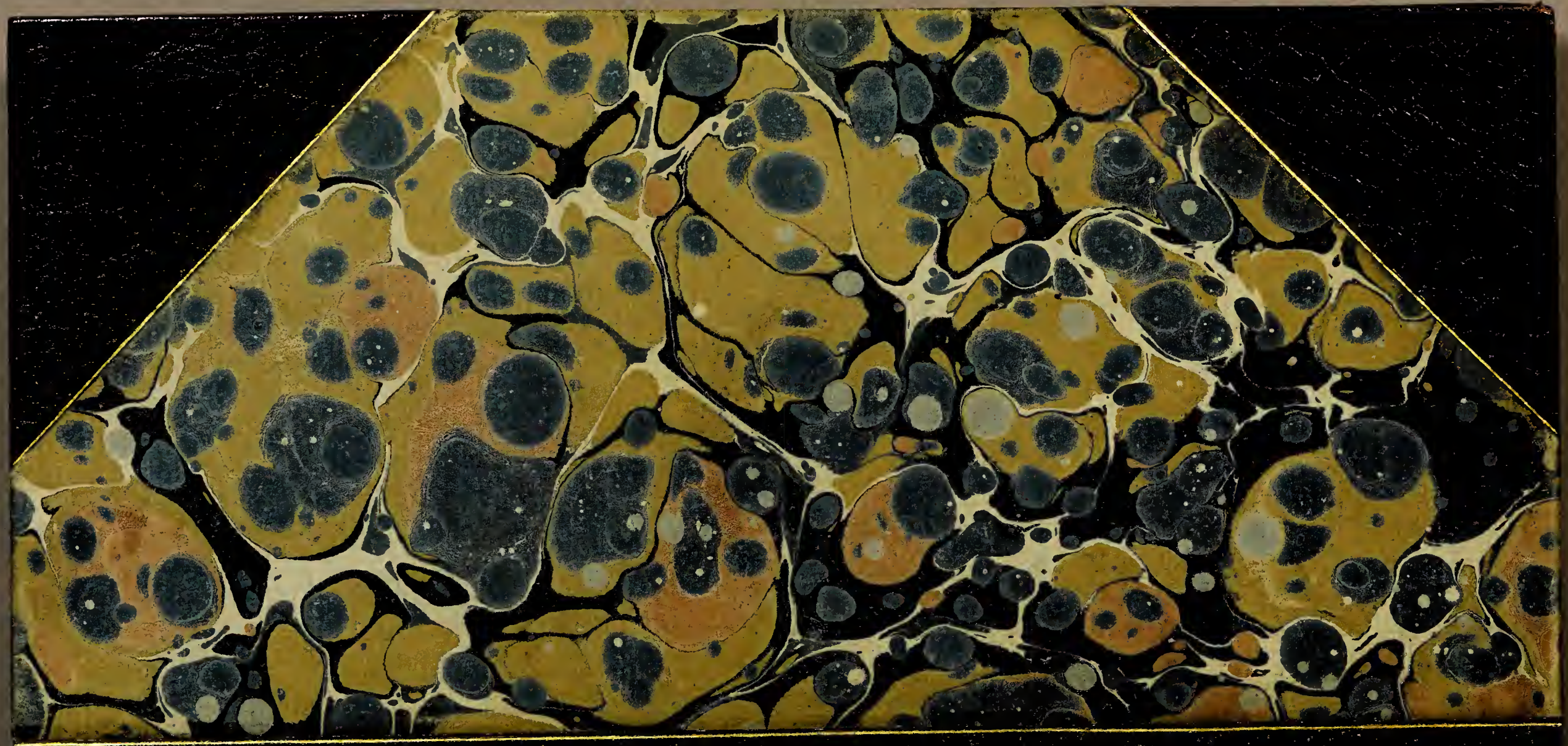
75. On the firſt of *January*, I would have an Inventory taken of all Things whatſoever in the Plantation, and the ſame fairly entered in a Book to be kept for that Purpoſe called the *Book of Records*, in which muſt be alſo kept by Way of Debit

Debit and Credit, according to the Method there appointed by my Father Sir JAMES DRAX, an Account of the Increaſe and Decreaſe of the Stock (viz.) what born, bought or received, alſo what dead, worn out, or diſpoſed of; in which Book muſt be entered a brief Account of all the Sugars, the Quantity of Pots made and knock'd out, and the Sorts, all the weekly Accounts of Rum made, and how diſpoſed of, what is yielded and how diſpoſed of, and alſo an Abſtract of all the Expences of the Plantation according to the Form preſcribed, a Copy of all which I wou'd have ſent me to *London* by the firſt Veſſel that ſails after the firſt Day of *January*. I would alſo have Quarterly Accounts of the Plantation Debits and Credits ſent me by convenient Opportunities. Alſo ſend me every Year as ſoon as you have done planting, the Number of the Pieces planted, according to the Plats of each Plantation, and at the ſame Time mention the Number of Acres you have to break the enſuing Year in every Piece, in which you muſt diſtinguiſh the firſt from the ſecond Crop Canes.

76. I ſhall not further enlarge, than by adding my moſt hearty Prayers to the great GOD for his Bleſſing on all your Undertakings, and aſſuring you of my being your cordial and affectionate Friend

Henry Drax.

Death
April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